

**INSPECTION SERVICES AND ENGINEERING CERTIFICATION**

PHONE: 780.870.1547 EMAIL: operations@indexndt.ca Head Office Mail: P.O. Box 10524, Lloydminster, AB T9V 3A6


**INSPECTION REPORT**

|                              |                          |            |                        |          |                         |          |              |            |  |  |
|------------------------------|--------------------------|------------|------------------------|----------|-------------------------|----------|--------------|------------|--|--|
| <b>EQUIPMENT LOCATION:</b>   | Lloydminster, Alberta    |            | <b>NDT PROCEDURE#:</b> |          |                         |          | INSP-001     |            |  |  |
| <b>EXAMINATION COVERAGE:</b> | <i>RANDOM:</i>           | 5%         | 10%                    | 25%      | 50%                     | 75%      | 100%         | <b>X</b>   |  |  |
| <b>ACCEPTANCE CRITERIA:</b>  | CSA W59                  | ISO 9927-1 |                        | CAODC RP |                         | OTHER:   |              | <b>X</b>   |  |  |
| <b>INSPECTION METHOD:</b>    | VT                       | <b>X</b>   | UT                     | <b>X</b> | MT WET FLOURESCENT      | <b>X</b> | MT WET BLACK | MT DRY RED |  |  |
| <b>EQUIPMENT INFO:</b>       | BLACK LIGHT MAKE - INOVA |            | LIGHT METER # 1822158  |          | MAG COIL # RC1-30120121 |          |              |            |  |  |

|                   |                 |                       |                  |
|-------------------|-----------------|-----------------------|------------------|
| <b>CLIENT:</b>    | K&S Power Tongs | <b>UNIT/RIG:</b>      | KSV002           |
| <b>EQUIPMENT:</b> | Volant Tool     | <b>MAKE/MODEL:</b>    | Volant CRTi3-7.0 |
| <b>RATING:</b>    | N/A             | <b>SERIAL NUMBER:</b> | KSV002           |

**EQUIPMENT PHOTOS**

**INSPECTION RESULTS**

|   |          |  |                            |                |
|---|----------|--|----------------------------|----------------|
| <b>ACCEPTABLE:</b>  | <b>X</b> | <b>REJECTED:</b>   | <b>DATE OF INSPECTION:</b> | March 15, 2021 |
| <b>TECHNICIAN:</b>  |          | <b>COMMENTS:</b>   |                            |                |
|  |          | <b>Part:</b><br>Mandrel<br>Cage [7.0 - 35.0P]-03<br>Upper Cam - 12<br>Lower Cam - 12<br>Cam Latch - 06<br>Cam Int. - 06<br>Die - 7.00"<br>Die - 7.00"<br>Die - 7.00"<br>Die - 7.00"<br>Die - 7.00"<br>Jaws<br>Jaws<br>Jaws<br>Jaws<br>Jaws   |                            |                |
|   |          | <b>Serial#:</b><br>82306-03-4459A01-06<br>82856-4459A02-10<br>81190-4445A04-06<br>81191-4459A05-07<br>80813-4459A06-04<br>80810-4459A03-03<br>80928-01-3J1145-02<br>80928-01-3J1145-05<br>80928-01-4558A07-43<br>80928-01-4411A15-28<br>80928-01-4558A07-47<br>80929-01-4538A03-74<br>80929-01-4624A16-40<br>80929-01-4466A01-20<br>80929-01-4466A01-21<br>80929-01-4466A01-23 |                            |                |
|   |          | <b>Material Thickness:</b> 1.320"/ 1.319"/ 1.324"/ 1.328"/ 1.325"  |                            |                |
|   |          | <b>REPAIRS:</b> NA   |                            |                |

**QUALITY ASSURED INSPECTIONS FOR QUALITY ASSURED BUSINESSES**

\*Except as provided herein, Index NDT Inspections Ltd. makes no warranty, express or implied with respect to the mechanical or other conditions of the equipment inspected by us. Index NDT Inspections Ltd. shall only be responsible in the event of damage resulting directly from their inspection, and in no event, shall the liability of Index NDT Inspections Ltd. exceed the cost of inspection. Our organization assumes only the responsibility of locating defects in the inspected components and welds made accessible at the time of inspection. All equipment should be cleaned to allow access to all welds and critical components. It is of the utmost importance that the unit's owner be aware that excessive coating over 10 mils can severely mask the detection of discontinuities while utilizing standard inspection techniques. We are not responsible for the mechanical or other conditions assembled condition except at customer's request.

IN-INCLUSION P-POROSITY IIC-INTERNAL UNDERCUT EUC-EXTERNAL UNDERCUT S-SLAG C-CRACKOR IP-INCOMPLETE PENETRATION NF-NON-FUSION CR-CRACK PH-PIN HOLE D-DISCONTINUITY



# REES N.D.T. INSPECTION SERVICES 2008 LTD.



15612-89 Street  
Grande Prairie, AB T8V 2N8

Grande Prairie  
(780) 539-3594  
(780) 532-8047 (Fax)

Dispatch  
1-888-540-3594  
www.reesndt.com

Vegreville  
(780) 603-4887  
Email: gcoers@reesndt.com

## LOAD TEST CERTIFICATE

**Owner** K & S Power Tongs  
**Address** 3614 63 Avenue Close  
Lloydminster AB T9V 2W1

**Date** 19-Mar-20  
**Workorder #** 186038  
**Purchase Order#** [REDACTED]

|                       |                     |                  |                               |
|-----------------------|---------------------|------------------|-------------------------------|
| <b>Contact Name:</b>  | Chris               | <b>Phone #:</b>  |                               |
| <b>Item:</b>          | CRT Mandrel         | <b>Location:</b> | Rees NDT Shop, Grande Prairie |
| <b>Make:</b>          | Volant              | <b>Model:</b>    | CRTi3-7.0                     |
| <b>Serial Number:</b> | 82306-03-4459A01-06 | <b>Unit:</b>     | NA <i>KSV002</i>              |
| <b>Capacity:</b>      |                     | 320 ton          |                               |

**Proof Load Test** 640000 lbs

**Test Date** 20-Mar-20

**Required Duration (sec)** 300

**Test Method:** Proof 1.00

**Peak Load** 642409 lbs

**Passed**

**Test Equipment:**

**Make:**

**Model:**

**Serial Number:**

**Capacity:**

Testing Frame

Volker Ries

525 ton

VR-01

525 ton

Pressure Gauge

Rosemount

3501

-

(0-5000) psi

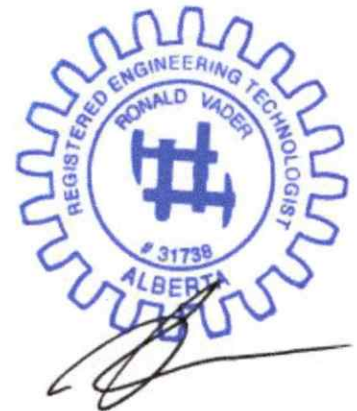
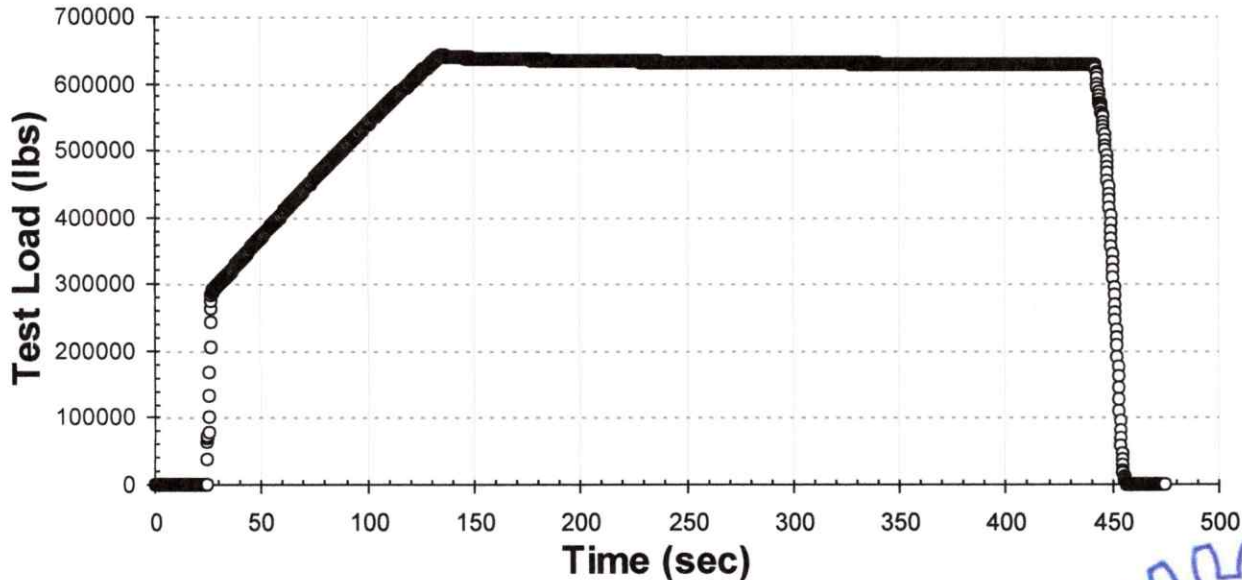
Data Logger

ACR Systems

SRP-7-32K 0-25MA

96674

(0-25 mA)



Inspected By: K. Gejdos Millwright (J-09-31585) Machinist (J-11-16754) J. Ibarbia

Workorder



# REES N.D.T. INSPECTION SERVICES 2008 LTD.



15612-89 Street  
Grande Prairie, AB T8V 2N8

Grande Prairie  
(780) 539-3594  
(780) 532-8047 (Fax)

Dispatch  
1-888-540-3594  
www.reesndt.com

Vegreville  
(780) 603-4887  
Email: gcoers@reesndt.com

**INSPECTION DATE:** 19-Mar-20

**CLIENT:** K & S Power Tongs  
**ADDRESS:** 3614 63 Avenue Close  
Lloydminster AB T9V 2W1

**RECERTIFICATION DUE:** 19-Mar-2025

**REES NDT PO NUMBER:** R58552  
**CLIENT PO NUMBER:**  
**REES NDT WO NUMBER:** 186038

## INSPECTION CERTIFICATE

**CERTIFICATION OF:** CRT Mandrel  
**MAKE:** Volant  
**MODEL:** CRTi3-7.0  
**SERIAL NUMBER:** 82306-03-4459A01-06  
**UNIT NUMBER:** NA  
**CAPACITY:** 320 ton  
**OWNER:** K & S Power Tongs  
**REPAIRS/MECHANICAL COMPLETED BY:** NA

Rees NDT Inspection Services 2008 Ltd. performed a VISUAL AND NON-DESTRUCTIVE TESTING inspection on the above mentioned CRT MANDREL. All observations have been recorded and are disclosed in the complete documentation for Rees NDT Work Order #186038. The scope of this certificate is limited to the inspection of the item's structural condition at the time of inspection and does not imply a review of the equipment's design or its associated capacity rating. The capacity noted above reflects the original equipment manufacturer's maximum capacity rating and may be reduced by operating conditions, regulatory requirements and the use of auxillary equipment that has a lower capacity rating.

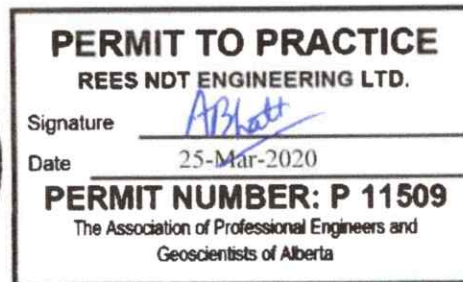
The undersigned Engineer reviewed all the inspection reports and has issued this certificate after all required repairs (if any) were completed. In the undersigned Engineer's opinion, the CRT MANDREL may be returned to service and is safe to use within the original manufacturer's specifications. The equipment owner is obliged to supply the OEM's operating instructions with the equipment and maintain the OEM's identification and capacity markings. If OEM information cannot be obtained, certified replacements must be obtained from a Professional Engineer.

This certification covers the above mentioned unit for a period of 5 YEARS AS PER API-8B from the date of inspection, or until the unit is damaged by handling, transportation or operation.

Reviewed  
By:



25-Mar-2020



Inspected By: K. Gejdos Millwright (J-09-31585) Machinist (J-11-16754) J. Ibarbia

Non-destructive Testing · Wall Thickness Testing · Hardness Testing · Crane & Picker Certification · Drilling Rig Certification